

REMARKS

In the Office Action dated May 31, 2005, claims 1-32 are pending in this application. Claims 1-32 were rejected. Claims 13 and 19 have been amended to overcome a rejection for indefiniteness. Claim 28 has been amended to clarify claim scope. No claims have been canceled or added. Applicants respectfully request reconsideration and examination in view of the following remarks.

Claim Rejections - 35 U.S.C. § 112

Claims 13 and 19 were rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 13 and 19 are now amended to particularly point out and distinctly claim the subject matter.

Claim Rejections - 35 U.S.C. § 103

Claims 1, 6, 28, 31, 32, 2, 3, 7, 4, 8, 9, 11, 12, 18, 29, 14, 30, 15, 16, 17, 27, 20, and 21 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Yim et al., U.S. Patent No. 6,580,727 B1 (hereinafter Yim) in view of the Article "Efficient Implementation of Semaphores in Controller Area Networks" by Cena et al., Industrial Electronics, IEEE Transactions on, Volume 46, Issue 2, April 1999, PP417-428 (hereinafter Cena). Applicants respectfully submit that Yim in view of Cena does not teach or suggest each and every feature of Applicants' independent claims 1, 6, 11, 20, 28, and 31.

Claim 1

Applicants' claim 1 is drawn to a system for an ADSL access network for providing ADSL provision flow control at a DSLAM switch. The system comprises, among other features, a network management system including a control algorithm for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore and a second semaphore. The first semaphore controls a first provision request flow at an element management system level and the second semaphore controls a second provision request flow at the DSLAM switch level.

In contrast, Yim discloses an access multiplexer or DSLAM for a DSL communications network, having element management system capability. The DSLAM includes a DSLAM controller 25 that performs the function of handling data flow control and channel management, specifically in performing Layer 2 (Data Link) and Layer 3 (Network) network protocol processing according to various protocols. (See Yim, column 5, 60-66). The reference in Yim to Layer 2 and Layer 3 network protocols refer to the OSI model. The OSI, or Open System Interconnection, model defines a networking framework for implementing protocols in seven layers. The performance of network protocol processing by a DSLAM controller does not teach or suggest a network management system introducing a two level semaphore including a first semaphore controlling a first provision request flow and a second semaphore controlling a second provision request flow as recited in Applicants' claim 1. The DSLAM controller 25 is part of the DSLAM and thus, does not teach or suggest a network management system.

Also, the software architecture of the DSLAM controller 25 discloses a protocol layer used for initialization of communications between the DSL modem and the DSLAM. After the bidirectional channel has been established the protocol layer is used for storage and processing of data packets. (See Yim, column 8, lines 7-17). The Office Action recites column 5, lines 60-66 in support of asserting that Yim discloses a network management system introducing a two level. Applicants respectfully traverse this assertion and submit that the cited section of Yim does not mention, contemplate, or suggest controlling a provisioning request to establish a virtual circuit connection. The cited section of Yim discloses controlling data flow after provisioning has taken place. The Office Action acknowledges that Yim does not expressly disclose a semaphore and relies on Cena to provide where Yim is deficient. Cena does not disclose controlling provisioning request either. Thus, neither Yim nor Cena alone, or in combination teach or suggests Applicants' claim 1. Claim 1 is thus allowable over Yim in view of Cena.

Claims 6, 28, and 31

Applicants' claim 6 is drawn to a system for an ADSL access network for providing ADSL provision flow control at a DSLAM switch. The system comprises, among other features, means for managing the ADSL access network including means for controlling ADSL provision flow on a DSLAM switch by introducing a two level semaphore including a first semaphore controlling a first provision request flow at the means for managing the ADSL network element

level and a second semaphore controlling a second provision request flow at the means for multiplexing level. As described above with respect to claim 1, Yim in view of Cena does not teach or suggest introducing a two level semaphore for controlling provisioning requests as recited in Applicants' claim 6.

Amended claim 28 and claim 31 also include elements reciting a two level semaphore controlling provision request. Thus, Applicants' claims 6, 28, and 31 are also allowable over Yim in view of Cena.

Claim 11

Applicants' claim 11 is drawn to a method of providing ADSL provision flow control at a DSLAM switch. The method comprises, among other features, (1) sending a provision request from a network management system to a DSLAM switch, (2) determining whether a DSLAM level semaphore is available at the DSLAM switch, and (3) determining whether an element management system level semaphore is available. As described above with respect to claim 1, Yim in view of Cena does not teach or suggest introducing a two level semaphore for controlling provisioning flow as recited in Applicants' claim 11. Thus, Applicants' claim 11 is allowable over Yim in view of Cena.

Claim 20

Applicants' claim 20 is drawn to a method of providing ADSL provision flow control at a DSLAM switch. The method comprises, among other features, (1) determining whether a provision request for a DSLAM switch was issued by a GUI operator and (2) resetting an attribute associated with the provision request made by the GUI operator.

The Office Action recites column 10, lines 35-37 and 48-50 of Yim in support of asserting that Yim discloses Applicants' claim 20. Applicants respectfully traverse this assertion and submit that although Yim discloses that a service application operates on host and user computers, Yim does not teach or suggest determining whether a provision request was issued by a GUI operator and resetting an attribute associated with the provision request. (See Yim, column 10, lines 35-37 and 48-50). Thus Applicants' claim 20 is allowable over Yim.

Dependent Claims

At least because claims 2-4, 7-9, 12, 14-18, 21, 29-30 and 32 inherit the language of allowable independent claims, claims 2-4, 7-9, 12, 14-18, 21, 29-30 and 32 are also allowable over Yim in view of Cena.

Claims 5, 10, 23, 25, 26, 13, 19, 22, and 24 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Yim in view of Cena, and further in view of Tang et al. U.S. Patent No. 6,885,672 (hereinafter Tang). Applicants respectfully submit that only under subsection (e) of 35 U.S.C section 102 would Tang qualify as prior art. Thus, Tang shall not preclude patentability under 35 U.S.C. section 103, because the subject matter and the claimed invention were, at the time the invention was made, subject to an obligation of assignment to the same person. Thus, because Tang does not qualify as a prior art reference under section 103, the rejection should be withdrawn.

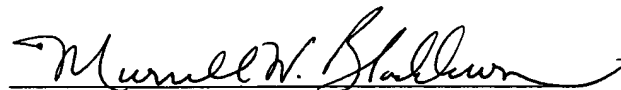
CONCLUSION

In view of the above amendments and remarks, Applicants respectfully request a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(404) 954-5041

Date: August 31, 2005


Murrell W. Blackburn
Reg. No. 50,881

